End of Year Accomplishment Report

of the

Selkirk Cooperative Weed Management Area

December 2003

Monique Worley and daughter assist Ron Cushman, Boundary County Weed Supervisor, with absinth wormwood control on their property under the Boundary County Small Infestations project, priority # 3.

2003 Cooperative Borders & New Invaders

Priority # 1

Bonner County

Japanese knotweed is not well known in the area as infestation sites are few, small and scattered. It appears nobody has a clue what it is. Many people have been told it's an imitation bamboo. Some say they got a start of it from local nursery businesses. I've found none who are selling it. What started out to be two reported locations, we now know of 4 individual properties infested with about half an acre. Unconfirmed reports along the Pack River could triple this amount. The best control method is to be determined in 2004. The sensitive and/or difficult locations create problems. Some landowners have tried different approaches to control it but have realized seasonal control only. One site was sprayed with Garlon to the foliage**.**

The tall foliage behind the truck is Japanese knotweed.

Then part of this site was cut about 8 inches above the ground with a chain saw and the hollow stalks were individually filled with Garlon. The goal is to find some way to get good control without the need to "spray" near the water.

Japanese knotweed cut stumps.

Blueweed has been found only in two locations. Both are on road right-of-ways and spraying was done on a large area to help prevent missing any plants.

Absinth Wormwood has been thought to be in isolated locations. Attempts were made to treat known locations with herbicides. During the course of the season, we found that it appears to be quite scattered over large areas of the southern half of the county. Only a few locations have heavy populations of plants threatening productive lands. Landowners'

attempts to control this weed usually fail because of poor product choices and poor timing. Educational efforts will hopefully correct this problem. Multiple treatments of costly herbicides are necessary.

Herbicide treatment: 2 acres by back pack @ $30.00 = $60.00
36 acres by vehicles @ $40.00 = $1,440.00

New invaders: Japanese Knotweed @ 2 acres,
Blueweed @ 1 acre
Absinth wormwood @ 35 acres
Acres inventory: 72 acres
Educational activities reached 5 people directly.
Acres of herbicides treatment monitoring: 38 acres

Boundary County
The projects slated for Boundary County were not completed this year due to the Russian knapweed having been eradicated from previous treatments; and the leafy spurge populations were not located until after the close of the spray season. We've requested that funds remaining for this project be carried over for treatment of leafy spurge in 2004.

Pend Oreille County
Areas with leafy spurge, common bugloss, rush skeletonweed, kochia, and common catsear posing the risk of spread to Idaho, were sprayed with appropriate chemicals for control. Landowner costs for control work in these areas were $735.00. Pend Oreille County expenses for this season's control work were $11,904.00.

Currently we struggle with an extensive seed bank at most of the locations and the weed's struggle for survival, like the growth rate of common bugloss and its propensity to sprout new seedlings with each spring and summer rainfall. Some landowners with leafy spurge are tormented by the extensive root system, tired of the plants that return year after year.

Contacts

Bonner County questions or for more information contact Brad Bluemer, Bonner County Weed Superintendent at (208) 263-3175.

Boundary County questions or for more information contact Ron Cushman Boundary County Weed Superintendent at (208) 267-5341.

Pend Oreille County questions or for more information contact Sharon Sorby Pend Oreille County Coordinator at (509) 447-2401.

2003 Neighborhood Cooperative Projects

Priority # 2

Bonner County
This program is by far the most appreciated weed control effort and the state and county can be very proud. It's the ice-breaker to getting people to "work together" on weeds. Many landowners who purchased or inherited property are overwhelmed with the costs of cleaning up the weeds. This cost assistance makes weeds a high-priority item. Every landowner who's been on this program, seems quick to tell other people how to get the job done. This has probably yielded better results than any advertising program could expect.

Educational Activities: Weed Demonstration Day meeting had 126 people attending, for an all day program, lunch served by donations. Several organizational meetings were held in April and May with over 200 people attending. Publications promoting weed control are handed out by county employees at 5 dump sites all season long. Radio and television spots were used for the first time along with newspaper articles written by our weed committee members. This could have reached more than 3,500 individuals**.**

Herbicide treatments: Per materials used; 86 acres by ATV @ $30.00 = $2,580.00
172 acres by vehicles @ $30.00 = $5,160.00
Physical treatments: 4 acres pulled
600 acres mowed
Acres of Inventory: 1,120 acres
Acres of Rehabilitation: 80 acres

Boundary County
When it was all said and done, 39 qualifying groups had applied for the Neighborhood Cooperative. Twenty-five of these groups qualified for chemical reimbursement amounting to $6,904.67 plus administrative supplies (invoice #104091) of $98.10, for a **total of $7,002.77.** Three additional groups used chemicals from '02' co-op $'s and 2 other groups were in good enough shape weed-wise to manage control by hand-pulling and mowing. Two groups declined participation due to divorce, and two groups were planning on having their spraying done, and the applicator failed to complete their spraying! One group didn't participate because they lost their graduating daughter. Three of the 4 remaining groups had financial problems (mainly due to mill closures) and really weren't in a position to purchase chemicals up-front, and one group is what I would classify as **lazy!**

Bottom-line, 30 groups (77%) participated in weed control! Of the participating groups, 83 families were represented! 1,546 acres were represented in chemical control! 35 acres were kept under control mowing! 20 acres were kept under control hand-weeding! **Total acreage represented 1,601 acres!**

Pend Oreille County

There was a total of 24 landowners forming 6 groups that participated in the Neighborhood Cooperative project. The Glen Cova keep group sprayed 3 acres for spotted knapweed and plumeless thistle with a total cost of chemicals $22.35. Happy Valley Neighbors sprayed 16 1/2 acres for spotted knapweed, mullein, common tansy, thistles and St. Johnswort with a total cost of chemicals $546.53. Bear Paw Restoration Project group sprayed 6 acres for Canada thistle, St. Johnswort, spotted knapweed, oxeye daisy, spirea, orange & yellow hawkweed, and sulfur cinquefoil with a total cost of chemicals $266.95. Glenn & Leonard Team group sprayed 1/2 acre for spotted knapweed and Canada thistle with a total cost of chemicals $14.90. Smith/Corneil group sprayed 1 acre for spotted knapweed with a cost of chemicals $14.90. Weedeaters group sprayed 2 1/2 acres for all weeds found in designated area with a total cost of chemicals $10.00. John Haikkila group sprayed 10 acres for spotted knapweed with a total cost of chemicals $20.00. Totals for 2003 - treated 39 acres, landowner cost $895.63 and county cost $2,031.42.

2003 Small Infestations
Priorities # 3, 4 & 6

Boundary County

The initial part of this project was spent with Mike Gondek walking, inspecting, setting stakes and taking pictures of the Worley property. Approximately 10 days later, when there was a break in the County spraying I got together with Gary & Monique Worley and tried to set up a day that Gary & I could do the work. Gary's impossible schedule and the uncertain weather prompted me to provide them with a 100 gallon County sprayer and a backpack sprayer so that Gary could do the spraying when it was convenient. I also provided 6 gallons of **Redeem,** 5 gallons of **2,4-D,** 2 1/2 gallons of **Banvel,** and 2 1/2 gallons of **R-11.**

Absinth wormwood infestation on the Worley property. Sprayed by the landowner.

Invoice #5802 is a recapitulation of this transfer. It should be noted that most of their property is either very steep terrain or rolling hills, and requires backpack spraying for the most part. Initially I thought this project was going to flop, but once Gary got in the groove and learned what he was doing (later in year) I feel that he's done **fair,** but with chemicals to carry-forward into '04' and his knowledge gained, I'm sure he'll do an excellent job this coming season. **Total Chemicals $622.04**

The other proposed site for wormwood control was the Chuck Huff property. Chuck took me for a quick tour of his property and there was no evidence of a wormwood problem, although he did have some wormwood, common tansy, knapweed and several other broadleaf weeds. Chuck & I concluded he had approximately 3 acres ± which needed some work. Two weeks later I delivered the following chemicals to Chuck for his spot-spraying. From invoice #5801, 3 oz's **of Escort,** 1 gallon of **Garlon 3A,** 1 gallon of **2,4-D Amine,** and 1/8 gallon of **R-11 spreader.** Chuck did an excellent job, especially with what little he had to work with. A prime example of what spot-spraying can do! **Total $140.86**

The second part of this project, involving Canada thistle control, is best described as almost existent. On several occasions while doing County spraying towards Porthill & Eastport (both), I stopped on my normal "route" and spot sprayed several patches of Canada thistle. (When it actually came time to do the bulk of the project, or upon completion of County

right-of-way spraying, most of the thistle plants were in full bloom! After farming for 25 years **I do not believe in spraying fall re-growth. Just pretend you had to purchase the chemicals yourself!)** I was able to spray 2 patches of reasonable size, one at the junction of CR 23 & CR 24 (in Paradise Valley), approximately 2 1/2 acres, and the other at the turn-off to CR 57 off Hwy 95 consisting of approximately 1 3/4 acres = 4.25 acres.

Vanquish @ 1/2 pint/acre @ $68.17/gal =	$18.11
Escort @ 1 oz./acre @ $17.83/oz =	$75.78
2,4-D @ 1 pint/acre @ $10.56/gal =	$ 5.61
Total	**$99.50**

Grand total for project $874.58

Pend Oreille County

There is a total of 119 landowners who are affected by one or more of the weeds involved in this project. Plumeless thistle, Scotch broom and/or meadow knapweed. Costing landowners $551.00 for work done in 2003. All the control work is done with back packs approximately 86 acres were sprayed and approximately 3000 acres were monitored. Total county cost for work done in 2003 is $9,086.21.

Bonner County

The largest portion of this project was treating tansy ragwort on a ranch bordering Grouse Creek and the forest services seed farm. It involved several landowners on 4 sections of land. The primary infestation was on a half section of pasture and forest land. This is the only known location of this weed in the county and cooperative plans with all surrounding property owners is to eradicate tansy ragwort over the next 5 to ten years if possible.

Both spring and fall treatments are made by every landowner involved.

A field in the Grouse Creek drainage heavily infested with tansy ragwort. Inset is a close-up of a blooming pant.

Houndstongue was also found while treating tansy ragwort at grouse creek. We treated every plant we could find. Treatments were made by as many as 9 people with back-packs in the forested areas for over 8 days. ATV's were used where possible, landowners treated

pastures with rented pull-trailers, and all roadways in the area were treated by the county.

A lot of effort was made by forest service and county employees searching a large amount of acres to ensure outside boundaries of the infestation could be determined. The same strategy was used at Hoo Doo Lake, south of Priest River, on an isolated houndstongue infestation. The use of an ATV this season was the only possible way so many acres could've been inventoried. The HooDoo lake area involves very few plants found, after two years efforts, on approximately 200+ acres.

The crew at Grouse Creek, ready for a day of spraying.

Herbicide treatments: 25 acres by back packs @ $35.00 = $875.00
18 acres by ATV @ $35.00 = $630.00
35 acres by vehicle @ 35.00 = $1,225.00
New Invaders: Tansy ragwort and Houndstongue
Physical treatments: 1,720 acres inventoried and checked for obtaining a boundary

Educational activities reached 20 people directly
Monitoring 1,720 acres as needed.

2003 Water To Site - Boundary County
Priority # 5

This project was funded with carry-over funds, and not only supplied water directly to the site but Road & Bridge helped facilitate a complete move within the County yard. The 3 bay-carport was cut in half, moved and reassembled stronger that the original. The chemical shed was also moved and Water is only a few feet away. The convenience and efficiency gained were instantly evident**!**

A view of the new mixing shed and water hydrant.
Thanks to the Road and Bridge crew!

Cost

Northern Home Center.....	$	103.48
Badger Pluming.....		23.28
Northern Home Center.....		390.89
Northern Home Center.....		113.81
B.F. Redi - Mix.....		208.50
Water Systems Mgmnt.....		50.00
Three-Mile Water District.....		2,000.00
Three-Mile Water District.....		235.53
Farm & Garden.....		96.17
	$	**3,221.66**

View of the hydrant and hose reel. Quality

Also from these carry-over $'s, $267.61 was sent to Pend Oreille County, WA to help with the Neighborhood Cooperative program.

GRAND TOTAL SPENT ON PROJECT $ 3,489.27

2003 Fault Lake Trail

Priority # 7

Following the $2,498 Idaho Department of Agriculture noxious weed cost share award, the U.S. Forest Service received Resource Advisory Committee (RAC) funding for the same project. The Idaho Panhandle National Forests elected to utilize the RAC funding to accomplish this cooperative project with the local backcountry horse group. The horse-transported equipment and herbicide were purchased in preparation for the field season utilizing these RAC funds. A necessary trail-brushing contract was scheduled prior to weed control activities; however, due to the high fire danger this past season, the contract was stayed and the work not completed until late this fall. Completion of this project was not accomplished. The Forest Service is holding the remaining RAC funds and the purchased equipment to complete this project during the 2004 season. ISDA funding for this project was not necessary.

The SCWMA would like these funds reallocated for other projects.

2003 Scotch Broom
Priority # 8

Bonner County

Very few people in the county know what this weed is and why it's a problem. People sometimes dig small plants and transplant them to their yards and bordering rights of ways.. Property owners that have had this weed for a few years are very cooperative in establishing control methods. This first year's major efforts should seriously reduce the attraction of flowering plants people might transplant. Herbicide treatments were made with back-packs on over 60 acres of rough, steep, and brushy mountainsides between Trestle Creek and the city of Hope. Plants were scattered in this area and there were seedlings to plants over 7 feet tall.

Scotchbroom plants at Bottle Bay, preparing to spray.

Bottle Bay landowners welcomed assistance on over 50 acres of light to heavily infested areas. Every plant over 24 inches high or half inch at the base was cut by contractor crew, then piled for the landowners to burn next year. This process was selected because herbicide treatments on large plants didn't appear to translocate well enough to kill the entire roots. All smaller plants treated didn't recover from tests done last year.

Warren Island, near Hope, is the primary source of transplants and seed supply. Scotch broom has been there a long time and has become well established. The island involves approximately 120 acres and many landowners, several that don't live in the area. Since coordinating efforts among landowners failed in past years, this program will get the entire infestation reduced from seed production to seedlings. Treating seedlings every spring and fall for the next several years greatly reduces the spread and costs of control.

Brad Bluemer cuts a large Scotchbroom plant in preparation of herbicide treatment on the Jefferies property.

A contractor crew cut and piled larger plants to be burned by the landowners next year. The county will monitor annual control efforts required of landowners.

A few other small infestations have been found around the county and with continuing educational efforts we believe containment is very possible within the next year.

Contractors on Hope Island cut larger plants in preparation for herbicide treatment.

Herbicide treatments:
44 acres by back pack @ $44.00 = $1,936.00
128 acres by ATV @ $44.00 = $5,632.00
50 acres by vehicle @ $44.00 = $2,200.00

Biological Control Project
Priority # 9

In 2003 the Selkirk Cooperative Weed Management Area (SCWMA) hosted 1 biological control of knapweed field day, monitored past release sites and made additional releases of *Mecinus janthinus* (the toadflax stem borer), *Cyphocleonus achates* (the knapweed root weevil), *Agapeta zoegana* (the knapweed root moth), and *Galerucella spp.* (defoliating beetles of purple loosestrife). We also consolidated much of the information on past releases in Boundary and Bonner county, Idaho and shipped it to the Nez Perce Biocontrol Center so the center could compile a comprehensive map of past biological control releases.

We hosted the knapweed biological control field day in Sandpoint, taught by Dr. Mark Schwarzlaender of the University of Idaho and Carol Randall, USFS entomologist (we did not invoice the state for this program as it was paid for by the Inland Empire Cooperative Weed Management Area (IECWMA). The Nez Perce Tribe Biocontrol Center provided us with 20 releases of *Bangasternus fausti* (broad nosed knapweed seedhead weevil) that were distributed to workshop participants. We also depended heavily upon the Pend Oreille County Biological Control Liaison and Manager to make contact with residents of Bonner and Boundary counties and distribute biological control agents including *Larinus minutus* (the lesser knapweed flower weevil) and *Galerucella spp.*

We received several releases of *Cyphocleonus achates* from Dr. Jim Story of Montana State University and used these agents as breeding stock for a new rearing area we established on the Selkirk Ranch. Chip Lawrence, the owner of the organic ranch, was willing to allow us to construct rearing corrals and will allow us access to the land to monitor the progress of these much in demand knapweed root feeders. We hope that these corrals will provide us with a steady source of *Cyphocleonus*, adapted to our area, in the future.

Putting the final touches on a "CYPHO CORRAL" on the Selkirk Ranch.
These corrals have been used in Corvallis, Montana to mass rear *Cyphocleonus achates*, a highly prized knapweed root feeder. We now have one near Sandpoint.

Forest Service District Personnel used project dollars to buy many agents including *Cyphocleonus achates*. A number of releases were made along power line right of ways on the east shore of Lake Pend Oreille, and 3 releases were made in the Stampede Lake area South of Bonner's Ferry.

We were also able to procure a number of releases of *Mecinus janthinus* from the University of Idaho, Tom Barbouletos of the Forest Service, and the Animal and Plant Health Inspection Service (APHIS). We concentrated releases along highway right of ways beyond the spray zone.

For more information contact Carol Randall Forest Entomologist Idaho Panhandle National Forests at (208) 765-7343 or email crandall@fs.fed.us.

Mecinus janthinus released from their containers onto Dalmatian toadflax.

2003 ATV, 4-Wheeler
Priority # 10

A “TREMENDOUS” asset !! No other piece of equipment could be more valuable in finding, treating, and mapping new invading weeds in so few hours. It’s like getting an extra seasonal person for a fourth the cost. Almost 8 sections of land were inspected and treated that would not have been possible without it. All projects this year benefited from this machine and some might not have happened at all.

Biological Control Liaison Project
Priority # 11

Our first season of the Biocontrol Liaison project consisted of training a field inspector, surveying, collecting, monitoring, making some releases and contacting landowners. There is some difficulty at this point trying to get the message out to the landowners to inform them about this project however word is spreading by mouth.

Cyphocleonus achates

Boundary County 2003 brief summary -- Met with Don Bergstrand USFS, to monitor the release sites he made on the spotted knapweed and Dalmation toadflax (Stampede Area). Three *Larinus minutus* releases were made on private land for spotted knapweed.

Will follow up by monitoring these release sites in 2004. Performed road surveys for spotted knapweed and will follow up by contacting landowners this winter and spring. Currently have 5 landowners to contact and 3 areas to map and identify landowners. (These areas consist of large patches of spotted knapweed covering 10 to 40 acres).
Bonner County 2003 brief summary -- Met with various landowners and made four releases of *Larinus minutus* on spotted knapweed and one *Galerucella spp.* on purple loosestrife.

Superintendent, release *Galerucella spp.* on purple loosestrife in Boyer slough.

Will follow up by monitoring these release sites in 2004. Performed road surveys for spotted knapweed, again will follow up by contacting landowners this winter and spring. Currently have 5 landowners to contact, 6 areas to map and identify landowners. (These areas consist of large patches of spotted knapweed covering 10 to 80 acres)

Jan Rice, Pend Oreille County Biocontrol Manager, and Brad Bluemer, Bonner County Weed

For landowners, this project also provides an educational opportunity by first, informing them they have a weed problem. Second, inform them of the cost share programs that are available and how the weed has detrimental impacts. Finally, inform them of the control methods that are effective and doing something is better than nothing.

The foundation is set and plans of attack are being set into motion for the 2004 biocontrol season. Preparation and contacts are being made through the winter to allow more field-time for the 2004 season. The goal this winter is to meet with the County Weed Departments and local USFS employees to gather and exchange information on release sites, project goals, and implementation details and attend workshops to help introduce the biocontrol project. For more information contact Loretta Nichols at the Pend Oreille County Noxious Weed Control Board at (509) 447-2401 or email lnichols@coopext.cahe.wsu.edu

2003 Eurasian Milfoil
Priority # 13

Soil treatment at Pacific.

This project was difficult to execute for several reasons that plague water treatments of any public waters. How effective the program is depends heavily on timing of funding and timing of application.

Results of control is debatable as to a single season or multiple years of control per treatment. Split funding this season made planning and contracting the treatment for proper timing very difficult.

Seasonal control efforts appear to be very good from a visual inspection of sites. Good root kill or control is still being studied for maximum benefit of dollars spent. Each year treatments and testing brings us closer to the best program. The increasing acres this weed has spread exceeds our control dollars available.

Soil treatment at Pacific, looking toward the lake.

Appendix 1: Steering Committee

Board Member	Phone #	FAX #	Email Address
Sharon Sorby, Chairman	509-447-2401	509-447-2402	ssorby@coopext.cahe.wsu.edu
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Robert Wagner	406-826-3487		
Randy Poss			randyp@televar.com
Lang Baker			labaker@teleport.com

Appendix II: Project Summaries

Category	Weed Species	Acres Treated
Herbicide treatment		
New Invaders	absinth wormwood	2
	blueweed	2
	common bugloss	15
	common catsear	5
	Japanese knotweed	35
	kochia	7
	leafy spurge	12
	rush skeletonweed	20
Small Infestations	absinth wormwood	125
	Canada thistle	4
	Eurasian watermilfoil	50
	houndstongue	1
	meadow knapweed	15
	Plumeless thistle	25
	Scotchbroom	225
	tansy ragwort	78
Wide spread		
herbicide treatment	multiple	1,843
mowed	multiple	635
pulled	multiple	24
Biological releases	Canada thistle	25
	Dalmatian toadflax	250
	meadow knapweed	5
	purple loosestrife	1
	spotted knapweed	500
	St. Johnswort	5
Revegetation	n/a	80
Public contacts	n/a	>7,500
Acres surveyed or monitored	combined	8,909
GPS Mapping points	Biological agent release sites	77